

MODULE DESCRIPTOR

Module Title

Physiology And Exercise

Reference	HS1136	Version	1
Created	April 2021	SCQF Level	SCQF 7
Approved	June 2021	SCQF Points	15
Amended		ECTS Points	7.5

Aims of Module

This module aims to provide students with knowledge and understanding of the human body's physiological responses to a variety of exercise types.

Learning Outcomes for Module

On completion of this module, students are expected to be able to:

- 1 Explain the acute responses of the human body to exercise.
- 2 Explain the chronic responses of the human body to exercise.
- 3 Outline the body's main energy systems and their relative contribution to exercise.
- 4 Demonstrate the necessary professionalism through attendance at learning opportunities required for safe practice.

Indicative Module Content

Acute physiological responses to exercise and sport focusing on cardiorespiratory variables (e.g. heart rate, stroke volume, cardiac output, redistribution of blood, extraction of oxygen, blood pressure, respiratory frequency, tidal volume, pulmonary ventilation), hormone production, release and response (metabolism, fluid and electrolyte balance, stress response) mechanisms and impact of fatigue and thermoregulation. The body's main energy systems and their relative contribution to exercise (in relation to intensity and duration). The chronic adaptations of the human body to exercise, including those of the cardiorespiratory and neuromuscular systems. The influence that age and gender have on the above.

Module Delivery

Blended delivery comprising on campus and online learning and engagement. This will include Digital Learning Resources, Tutorials and Practical sessions.

Indicative Student Workload

	Full Time	Part Time
Contact Hours	36	N/A
Non-Contact Hours	114	N/A
Placement/Work-Based Learning Experience [Notional] Hours	N/A	N/A
TOTAL	150	N/A
<i>Actual Placement hours for professional, statutory or regulatory body</i>		

ASSESSMENT PLAN

If a major/minor model is used and box is ticked, % weightings below are indicative only.

Component 1

Type:	Examination	Weighting:	100%	Outcomes Assessed:	1, 2, 3
Description:	Closed Book Exam				

Component 2

Type:	Coursework	Weighting:	0%	Outcomes Assessed:	4
Description:	Minimal module attendance requirement of 80%				

MODULE PERFORMANCE DESCRIPTOR**Explanatory Text**

Component 1 grade based on grading proforma. Component 2 is a minimum modular attendance requirement of 80%

Module Grade	Minimum Requirements to achieve Module Grade:
A	Component 1 A; Component 2 Pass
B	Component 1 B; Component 2 Pass
C	Component 1 C; Component 2 Pass
D	Component 1 D; Component 2 Pass
E	Component 1 E; Component 2 Pass
F	Component 1 F and/or fails Component 2
NS	Non-submission of work by published deadline or non-attendance for examination

Module Requirements

Prerequisites for Module	None, in addition to course entry requirements.
Corequisites for module	None.
Precluded Modules	None.

INDICATIVE BIBLIOGRAPHY

- 1 KENNEY, W.L., WILMORE, J. H. & COSTILL, D. L., 2015. Physiology of sport and exercise. 6th ed. Champaign, IL: Human Kinetics.
- 2 MCARDLE, W. D., KATCH, F. I. & KATCH, V. L., 2014. Exercise physiology, energy, nutrition and human performance. 8th ed. London: Lippincott Williams & Wilkins.
- 3 POWERS, S. K., HOWLEY, E. T. & QUINDRY, J., 2018. Exercise physiology: theory and application to fitness and performance. 10th ed. Maidenhead: McGraw Hill.
- 4 MARIEB, E.N. & KELLER, S.M., 2017 Essentials of human anatomy and physiology. 12th ed. Harlow: Pearson Education.
- 5 MARTINI, J.L., NATH, J.L. & BARTHOLOMEW, E.F., 2018. Fundamentals of Anatomy and Physiology. 11th ed. Harlow: Pearson Education.